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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,636	02/23/2007	Larry R. Nepsund	00758.1636USWO	1439
23552 7590 05/01/2009 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER				
CLEMENTE, ROBERT ARTHUR				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
05/01/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/578,636

**Applicant(s)**

NEPSUND ET AL.

**Examiner**

ROBERT A. CLEMENTE

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 23-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-46 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date 20060911
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Information Disclosure Statement***

1. The Japanese Publication No. JP 59 - 170669 has not been considered because a copy of this reference has not been supplied with the instant application.

***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

"51" in figures 4 or 5 as in page 7 line 27.

"114" in figure 7 as in page 9 line 9.

"120" in figure 7 as in page 9 line 15.

"122" in figure 7 as in page 9 line 16.

"148" in figure 4 as in page 11 line 30.

"190" in figures 23 - 25 as in page 14 line 8.

"244" and "245" in figures 15 - 18 as in page 15 line 28.

"302" in figure 8 as in page 18 line 1.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as

either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because the examiner believes reference number "48" in figure 4 is an error and should be changed to --148--. In figure 8, reference number "308" appears to be an error and should be changed to --302--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Allowable Subject Matter***

4. Claims 23 - 46 are allowed.
5. The following is an examiner's statement of reasons for allowance:

The examiner did not find any prior art that taught or suggested a housing having first and second opposite ends and a sidewall between the first and second ends; the sidewall defining an access opening; an access cover removably positioned over the access opening; and a filter element operably installed and sealed in the housing; the filter element having first and second opposite flow faces; the filter element including media having a plurality of flutes; each of the flutes having an upstream portion adjacent to the first flow face and a downstream portion adjacent to the second flow face; selected ones of the flutes being open at the upstream portion and closed at the downstream portion; and selected ones of the flutes being closed at the upstream portion and open at the downstream portion; the housing being constructed and arranged to accept the filter element through the access opening in the sidewall; and a bump out region or ramp in the sidewall.

US Patent No. 6,231,630 to Ernst et al. represents the closest prior art. As shown in figure 1, Ernst shows an air cleaner with a housing (10). The housing has a first end where the inlet (11) is located and a second opposite end where the outlet (12) is located. The area of the housing (10) between the inlet (11) and the outlet (12) can be considered a sidewall and the opening (13) forms an access opening in the sidewall. The cover (20) forms an access cover removably positioned over the opening (13). The filter element (19) is installed through the opening (13). In column 1 lines 62 - 67, the

filter element is disclosed to be a pleated filter element. The examiner believes it would have been obvious to one of ordinary skill in the art to substitute the pleated filter element for a fluted filter element, such as one of the type disclosed in US Patent No. 6,190,432 to Gieseke et al., since fluted filters are known to be used in automotive air cleaners. The pivot socket (22) can be considered a pivot region in the housing. The filter element generally has to be slide through the opening (13) to be inserted in the housing, thus the housing can generally be considered to have a slide mount. As shown by the dashed lines in figure 1, the filter element (19) is generally "bumped out" away from the sealing surface (14) to be installed and removed. The area the filter is "bumped out" into is just a space within the housing and is not in or defined by the sidewall. Claim 41 does not require a bump out region to be in the sidewall, however, claim 41 includes a ramp in the sidewall. There is no teaching or suggestion in Ernst of a ramp in the sidewall of the housing.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

Other references listed on the PTO-892 (Notice of References Cited) are considered to be of interest disclosing similar air filters.

7. This application is in condition for allowance except for the following formal matters:

The objection to the drawings, as discussed above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT A. CLEMENTE whose telephone number is (571)272-1476. The examiner can normally be reached on M-F, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RAC

/DUANE SMITH/  
Supervisory Patent Examiner, Art Unit 1797